



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Moungi BAWENDI et al. Art Unit : 1639  
Appln. No.: 10/632,922 Examiner :  
Filed : August 4, 2003  
Title : SEMICONDUCTOR NANOCRYSTALS FOR INVENTORY CONTROL

United States Patent and Trademark Office  
Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

As a means of complying with the duty of disclosure under 37 CFR §1.56, and in accordance with 37 CFR §§1.97 and 1.98, Applicants, through the undersigned attorney, submit this Supplemental Information Disclosure Statement along with the references listed on the attached form PTO-1449.

Attached is a \$180.00 filing fee check. Please apply any additional charges or credits to Deposit Account No. 19-4293.

10/20/2005 HALI11 00000089 10632922

01 FC:1806

180.00 OP

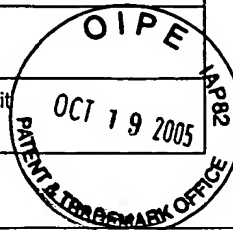
Respectfully submitted,

Date: 10-19-05

Harold H. Fox  
Reg. No. 41,498

Steptoe & Johnson LLP  
1330 Connecticut Avenue, NW  
Washington, DC 20036-1795  
Phone: 202-429-3000  
Fax: 202-429-3902

Substitute Form PTO-1449 (Modified)  <b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 14952.0274 CIP DIV	Application No. 10/632,922
		Applicant Moungi BAWENDI, et al.	
		Filing Date August 4, 2003	Group Art Unit 1639



Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AA	Ekimov, A.I. <i>et al.</i> , "Quantum Confined Atoms of Doped ZnO Nanocrystals," <i>Phys. Stat. Sol (b)</i> 229, No. 2, 897-901 (2002).
	AB	Ekimov, A.I. <i>et al.</i> , "Spin-flip and acoustic-phonon Raman scattering in CdS nanocrystals," <i>Physical Review B</i> , Vol. 58, No. 4, 15 (July 1998-II), 2077-2087
	AC	Ekimov, A.I. <i>et al.</i> , "CdS nanocrystal growth in thin silica films: evolution of size distribution function," <i>Journal of Crystal Growth</i> 184/185 (1998) 360-364.
	AD	Ekimov, A.I. <i>et al.</i> , "Dynamics of excitons in CuBr nanocrystals: Spectral-hole burning and transient four-wave-mixing measurements," <i>Physical Review B</i> , Vol. 57, No. 3, 15 January 1998-I, 1774-1783.
	AE	Ekimov, A.I. <i>et al.</i> , "Size-selective resonant Raman scattering in CdS doped glasses," <i>Physical Review B</i> , Vol. 57, No. 1, 1 January 1998-I, 341-346.
	AF	Ekimov, A.I. <i>et al.</i> , "Growth and optical properties of semiconductor nanocrystals in a glass matrix," <i>Journal of Luminescence</i> 70 (1996) 1-20.
	AG	Ekimov, A.I. <i>et al.</i> , "Size dependence of acoustic and optical vibrational modes of CdSe nanocrystals in glasses," <i>Journal of Non-Crystalline Solids</i> 197 (1996) 238-246.
	AH	Ekimov, A.I. <i>et al.</i> , "Subpicosecond dynamics of confined excitons in CuCl nanocrystals," <i>Materials Science and Engineering</i> A217/218 (1996) 167-170.
	AI	Ekimov, A.I. <i>et al.</i> , "Enhancement of electron-hole exchange interaction in CdSe nanocrystals; A quantum confinement effect," <i>Physical Review B</i> , Vol. 53, No. 3, 15 January 1996-I, 1336-1342.
	AJ	Ekimov, A.I. <i>et al.</i> , "Subpicosecond dynamics of confined excitons and optical nonlinearities of CuCl quantum dots," <i>Journal of Luminescence</i> 66 & 67 (1996) 406-409.
	AK	Ekimov, A.I. <i>et al.</i> , "Size-dependent Electron-Hole Exchange Interaction in CdSe Quantum Dots, <i>Il Nuovo Cimento</i> ," Vol. 17, Nos. 11-12, (1995) 1407-1412.
	AL	Ekimov, A.I. <i>et al.</i> , "Polaron and Exciton-Phonon Complexes in CuCl Nanocrystals," <i>Physical Review Letters</i> , Vol. 74, No. 9, 27 February 1995, p.1645.
	AM	Ekimov, A.I. <i>et al.</i> , "Growth of CdSe nanocrystals in ion-implanted SiO <sub>2</sub> films," <i>Journal of Crystal Growth</i> 151 (1995) 38-45.
	AN	Ekimov, A.I. <i>et al.</i> , "Effects of Resonance on Low-Frequency Raman Scattering From Semiconductor Nanocrystals," <i>Radiation Effects and Defects in Solids</i> , 1995, Vol. 137, pp-45-50.
	AO	Ekimov, A.I. <i>et al.</i> , "Optical Properties of Oxide Glasses Doped by Semiconductor Nanocrystals," <i>Radiation Effects and Defects in Solids</i> , 1995, Vol. 134, pp-11-22.

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified)		U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 14952.0274 CIP DIV	Application No. 10/632,922
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary) (37 CFR §1.98(b))			Applicant Moungi BAWENDI, et al.	
			Filing Date August 4, 2003	Group Art Unit 1639
	AP	Ekimov, A.I. <i>et al.</i> , "Enhancement of Exciton Exchange Interaction by Quantum Confinement in CdSe Nanocrystals," <i>Jpn. J. Appl. Phys.</i> , Vol. 34, 12-14 (1994).		
	AQ	Ekimov, A.I. <i>et al.</i> , "Growth of CdS nanocrystals in silicate glasses and in thin SiO <sub>2</sub> films in the Initial states of the phase separation of a solid solution," <i>Semiconductors</i> , 28 (5), May 1994, 486-493.		
	AR	Ekimov, A.I. <i>et al.</i> , "Interface effects on the properties of confined excitons in CuCl microcrystals," <i>Journal of Luminescence</i> 60 & 61 (1994) 396-399.		
	AS	Ekimov, A. I., "Surface Recombination of Nonequilibrium Electron-Hole Plasma in Laser-Modified Semiconductor-Doped Glasses," <i>Solid State Communications</i> , Vol. 87, No. 6, 577-580 (1993).		
	AT	Ekimov, A. I. "Dynamics of Nonlinear Optical Response of CuBr-Doped Glasses," <i>Superlattices and Microstructures</i> , Vol. 3, No. 2, 199-202 (1993).		
	AU	Ekimov, A. I., "Absorption and intensity-dependent photoluminescence measurements on CdSe quantum dots: assignment of the first electronic transitions," <i>Journal of the Optical Society of America</i> , Vol. 10, Nos. 1-12, 100-107 (1992).		
	AV	Ekimov, A.I. <i>et al.</i> "Preparation and investigation of SiO <sub>2</sub> films activated by CdS semiconductor nanocrystals," <i>Soviet Physics Semiconductors</i> , Vol. 26, 57-59 (1992).		
	AW	Ekimov, A.I. <i>et al.</i> "Generation of reflected second harmonic at semiconductor quantum dots," <i>JETP Letters</i> , Vol. 55, No. 8, 435-439 (1992).		
	AX	Ekimov, A.I. <i>et al.</i> "Dimensional Effects in Luminescence Spectra of Zero-Dimensional Semiconductor Structures," <i>Bulletin of the Russian Academy of Sciences</i> , Vol. 56, No. 2, pp. 154-157, February, 1992.		
	AY	Ekimov, A.I. <i>et al.</i> , "Fast switching of the transmission of light by glasses activated with CdS microcrystals," <i>Sov. Phys. Semicond.</i> , Vol.25 No.2, 164-166 (1991).		
	BA	Ekimov, A.I. <i>et al.</i> , "Resonance Raman Spectroscopy of Electron-Hole Pairs -- Polar Phonon Coupling in Semiconductor Quantum Microcrystals," <i>Solid State Communications</i> , Vol. 78, No. 10, pp-853-856, 1991.		
	BB	Ekimov, A.I. <i>et al.</i> , "Optics of Zero Dimensional Semiconductor Systems, <i>Acta Physica Polonica A</i> ," Vol. 79 (1991), No. 1. pp. 5-14.		
	BC	Ekimov, A.I. <i>et al.</i> , "Optical Properties of Semiconductor Quantum Dots in Glass Matrix," <i>Physica Scripta</i> . Vol. T39, 217-222 (1991).		
	BD	Ekimov, A.I. <i>et al.</i> "Rapid Processes of Darkening and Bleaching in CdS Doped Glasses," <i>Superlattices and Microstructures</i> Vol. 10, No. 3, 307-310 (1990).		
	BE	Ekimov, A.I. <i>et al.</i> , "Auger ionization of semiconductor quantum drops in a glass matrix," <i>Journal of Luminescence</i> 47 (1990) 113-127 North-Holland.		
	BF	Ekimov, A.I. <i>et al.</i> , "Time-Resolved Luminescence of CdSe Microcrystals," <i>Solid State Communications</i> , Vol. 74, No. 7, pp. 555-557, 1990.		

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified)		U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 14952.0274 CIP DIV	Application No. 10/632,922
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary) (37 CFR §1.98(b))			Applicant Moungi BAWENDI, et al.	
			Filing Date August 4, 2003	Group Art Unit 1639
	BG	Ekimov, A.I. <i>et al.</i> , "Quantum-Size Stark Effect in Semiconductor Microcrystals," <i>Journal of Luminescence</i> 46 (1990) 97-100 North-Holland.		
	BH	Ekimov, A.I. <i>et al.</i> , "Spectra and Decay Kinetics of Radiative Recombination in CdS Microcrystals," <i>Journal of Luminescence</i> 46 (1990) 83-95 North-Holland.		
	BI	Ekimov, A.I. <i>et al.</i> , "Influence of high hydrostatic pressures on the exciton spectrum of CdS microcrystals in glass," <i>Sov. Phys. Semicond.</i> 23(9), September 1989, pp. 965-66.		
	BJ	Ekimov, A.I. <i>et al.</i> , "Photoluminescence of quasizero-dimensional semiconductor structures," <i>Sov. Phys. Solid State</i> 31(8), August 1989, pp. 1385-93.		
	BK	Ekimov, A.I. <i>et al.</i> , "Photoionization of semiconducting microcrystals in glass," <i>Sov. Phys. Solid State</i> 31(1), January 1989, pp. 149-151.		
	BL	Ekimov, A.I. <i>et al.</i> , "Donor-like Exciton in Zero-Dimension Semiconductor Structures," <i>Solid State Communications</i> , Vol. 69, No. 5, pp. 565-568, 1989.		
	BM	Ekimov, A.I. <i>et al.</i> , "Nonlinear Optics of Semiconductor-Doped Glasses," <i>Phys. Stat. Sol. (b)</i> 150, (1988) pp. 627-633.		
	BN	Ekimov, A.I. <i>et al.</i> , "Nonlinear optical properties of semiconductor microcrystals," <i>JETP Lett.</i> , Vol. 46, No. 10, 25 November 1987 pp. 435-439.		
	BO	Ekimov, A.I. <i>et al.</i> , "Quantization of the energy spectrum of holes in the adiabatic potential of the electron," <i>JETP Lett.</i> , Vol. 43, No. 6, 25 March 1986, pp. 376-379.		
	BP	Ekimov, A.I. <i>et al.</i> , "Quantum Size Effect in Semiconductor Microcrystals," <i>Solid State Communications</i> , Vol. 56, No. 11, pp. 921-924, 1985.		
	BQ	Ekimov, A.I. <i>et al.</i> , "Size quantization of the electron energy spectrum in a microscopic semiconductor crystal," <i>JETP Lett.</i> , Vol. 40, No. 8, 25 October 1984, pp. 1136-1139.		
	BR	Ekimov, A.I. <i>et al.</i> , "Quantum size effect in the optical spectra of semiconductor microcrystals," <i>Sov. Phys. Semicond.</i> 16(7), July 1982, pp. 775-778.		
	BS	Ekimov, A.I. <i>et al.</i> , "Quantum size effect in three-dimensional microscopic semiconductor crystals," <i>JETP Lett.</i> , Vol. 34, No. 6, 20 September 1981, pp. 345-349.		
	BT	Ekimov, A.I. <i>et al.</i> , "Oscillations of polarization of recombination radiation of a variable gap semiconductor in a magnetic field," <i>JETP Lett.</i> , Vol. 25 No. 55, 526-528 (1977).		

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	